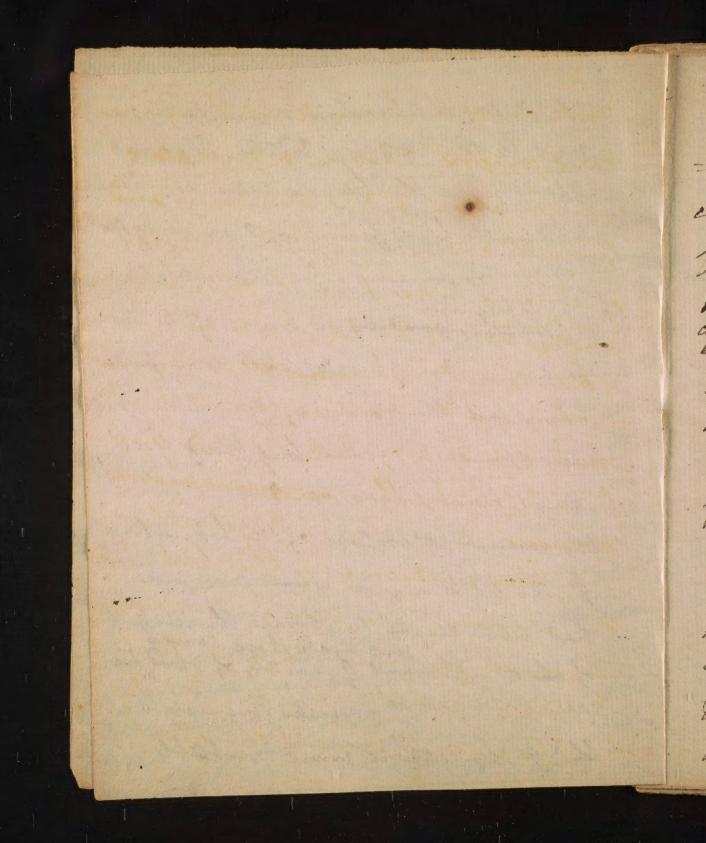
I but come now to treat of the apphalis flates of June. Before fenter upon this helyest of that Jehrer some umarko upon the brain and its appendages which are party of a poly-- inological and partly of a porthological be practical I tweether you in our physiology that Pratus. the Sphere in early part of our Course to plus treating upon the linestations of the blood, I said that the maker of our bodies had questo against the inordinate or turnettiness the blow wep els were unsually excited through = out the whole System = by the Thymus gland when it was the are work - eval generatity to the trongs, by the

the extensation of the V & Jornes by engaposed from a fact so make ugon the Thyprid glands by ma Congresped. - during fataits in Dogs, that this gland ser - ved to assest and Letnin the blood when too foreibly determined to the brain. But I not to be from the small sin of that gland, and from a brand any not aboutling the inferences of more por boyour; for experiments I have rijected that Inprosition. In Reeve in his epay on Cretinism published in the 5 " vol: 03 the Eden": insticut and Surgical journal letts us that in those lountries where Cretino are must numerous, many prople of sounds big orone minds have Bronchoule and Butterson is attryether audurtal. The Theyrord gland, believe arrests newvous determination to the larger pegis brain outs, but never arterial. Its use I believe brain outs, but never arterial. Its use I believe is thirty as a waits gate to the largery and speuts.

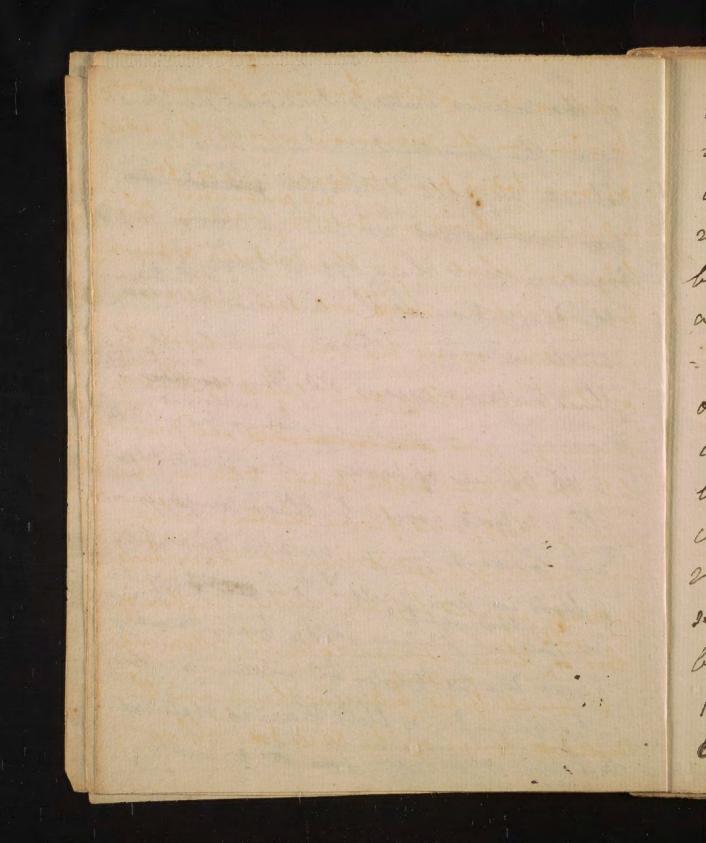
Re Plandule remules when it was too engrissely pro= sent to the Ridweys, by the Thypoid) fer gland when the larynd was over disting tos - to with blood from lond, or long spea not *** - laing, or Singing. In contemplating nd) the brains en poure of the brains the to an under flore of blood from fives, nto from all the courses of apreplicay, palwe - san struduely, from long blood Speathe nal - king, from anger, and even from ino the recumbent posture of the body in Slup, nds I was 40 to inquire what formision t the 2011 bad been made to obviate the illefits
of the a redundant quantity of blood to and j the brain . I suggested framerly that the of thought it most probable the



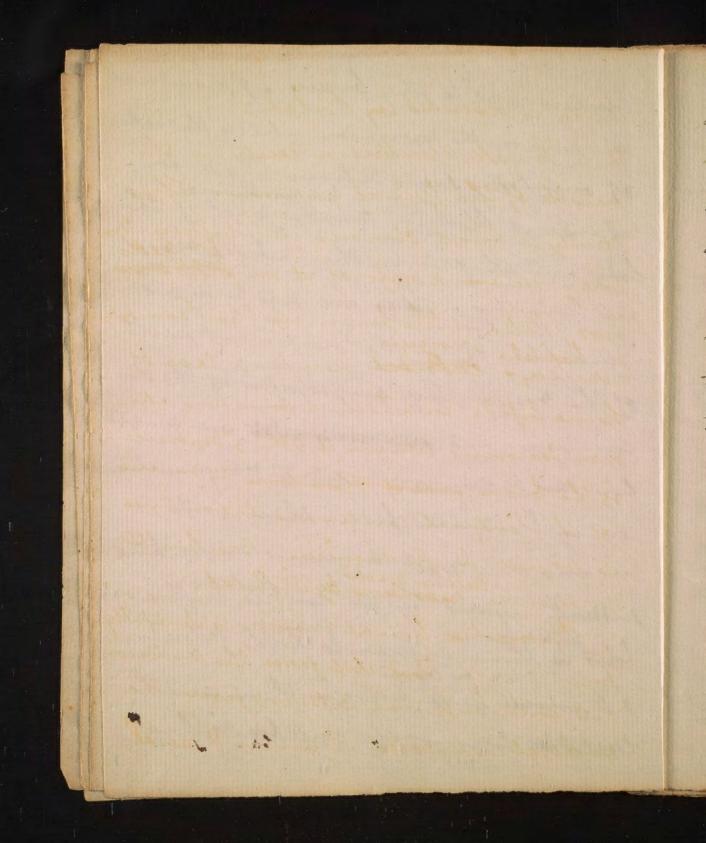
butiles of the brain served this improve tant purpose. Town a more elose cameration of this opinion , and from its connection with the mians a continuous point of the body I have no doubt of bits Consutrup. Tours the hungs to the liver and the paneres obviate the ill effects of being over distinded with blood for a while, by their big to top the determine giving way as it were, that is by their enercasing in their bulk, but this cannever take place in the brain. The Cranisum prevents its dilatation, and this it is said to such a degree as even to present the elevation

Various there can be no doubt of this being the Case, Baghoi letts us he found Dij of was neutra blood in the Ventricles of the January Anatomist Inalphissi who died of an apopleyy. allowing the bloodwefrels to be impart importied of their blood to admit of this large areumlation of it in the Dentie = eles, Still it shows that they are capa-- ble by anyorepriore of affording room for some than five or six ormes of revendant blood.

of the arteries inka pulsation. In this fase, the Dentireles which there cavities give way which we call Ventricles positions top to defend on become me prepid together, and thus afford more for nist the distintion of the artires berins with redundant blood. In a Child, of three or four years old, they continued to to contain in a hydro cephalus from 3 to hie 5 06 brunes of water. It is probably ME . they afford soon by their compression and contact for a greater quantity of blood in an abult. It is popible longitudinal bineses of the brain may apoint the ventireles by retaining a great - ter quantity of blood than is natural to them, when an answer quantity of



blood is sent to the brain. I proudnest to anention the provision which the maker of our bris sums to have made for and workingone the body and that is in the Enchalle obboyete and Isinalis. These are said to be a long - binnation of all the component parts of the brain. They are propelsed of the summe coverings, and wet to the are provided like the brain with arteries & veins which convey blood, and from them. The Encuns comployed to prevent their bing sufferly injured by an under influx of bood to them appear to be the following. I a small ypace between them and the tested bones of the Vertebra. This



Cavity is described by Portal 2 a small apperture or cavity in the Eniddle of the Spinal Inamow. This cavity is enost obvious in Children you may see in a draft of it in the hospital. Thousand Describes a Case of Spina bifida in which a communication was discovered between it &the 3 bentircle of the brain rach of This love by means of this internal cavity, and its existence is admitted by Picothomieni. Bouchin & malphige and for Portal. 3 The tester you al massow is plentifully Jupplied with blood veloclo from the anterior and posterior ypinal arteries & from the vestibral, intercestal, burstan & Jacrol

N DePortal mentions two Shorking facts in hysport of the openions I have advanced . I has a thild affected with Speria bifida he distinctly dans the tumor enlarged in every respiration, and lipsud in every expiration. This this his. The found after death a Cavity large eno to admit a guill which Communicated with the 3" cuntricle of the brain . 2 The opened & inspelled the Vestebree of several dogs & Cats & distinctly Here the Judulla Ysinalis enlarged & lefoned with each inspiration, and expiration. Thise mutions extended andy to 3° and 4th the Cervical vertebrain both cases. vol: W. p: 66.

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asteries. The Views which return the Hord which is carried by them are 4 in brumber and laggen than the prosterior, Portal suys that many let be called a Sinus. These Vino, probably serve by their distansion to and the two Cavities ty the hand mentioned in reliving the moull adolangate Hopinalis from the ill effects of reducedount blood when the discuss of the the spinal Irramon, or the brain in the Vilebra favour the thirty of have Selivered of the voes of the Carrities de

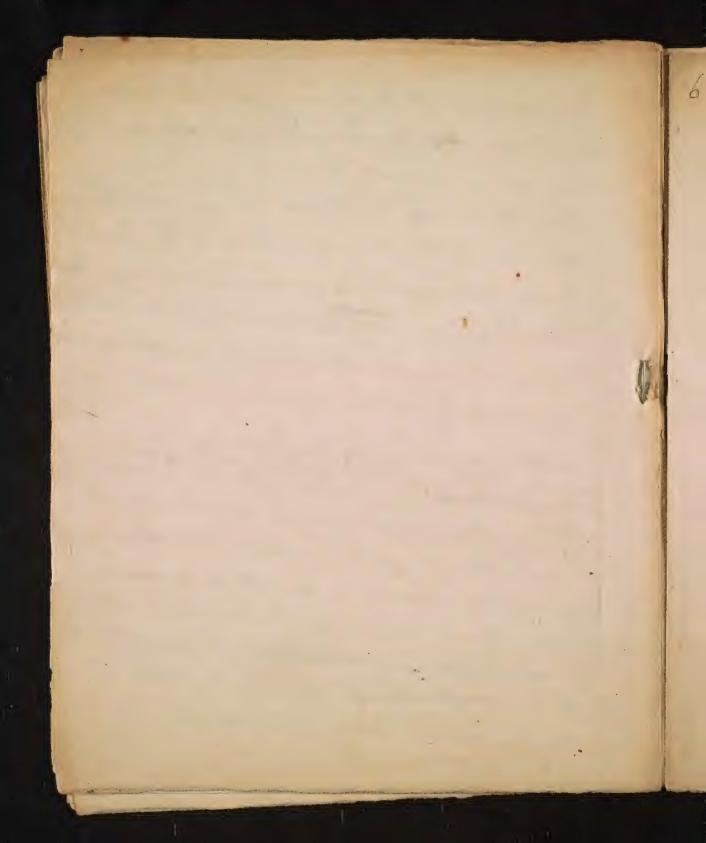
proteines the touts and evo plothe losts of the spinal 2 nerow, whereas the touts and the whereas the trades in the

in every respect with the Tundre uphing - his Calerons & thought the properties of the stand of bone of the stand of principles of one. It is so more cated of the stand of one of the same disease.

Da Sines in it which have been mentioned. 1 The Spine Bifida is nothing but an external droppy of the Springs menow in see every respect similar to theld.
- ternal droposy of the brain, except on, Athe & external Droppy of the brain is induced by an opening of the futures of the brain - the Spine bifida, by the absence of a ypinal process of h the Best bree : Bob formationes it appears
we are too gaping of or opening between two of the Destibre, The Discharge of Waterby of the Spina Bifida produce the Collapse of a brain distended with Hybro. - upshalus caternus. In this case the water 2 a severe pain in the back generally

au M a be he be · 101 w 2 Dt - D 3 de 4 Ageners of great morbid action as certainly as a puin in the head. may not this be occasioned by the carities of inces of have described, heing so overcharged with blood, as no longer to journto ito propo upon and histending the dura topical enamon, and thus to to exite the pain & have mention 3 may not the books of the bowels be occasioned of times by the Depreparation of the news which if sue from the fine 07 by too much blowd, than by these t Land not the weekness in the lower

hi in At 2 2 we le H hinds, and Obstinctions in the bruds in proces to be formationes indued by the Jame Carese? -But gent: If I will no bruger rest the Opinion of the Ensibil State of the Spinal marson upon Genjertenes & analogy. De This obscure and Eased part of the body has not escaped the Anatomical eyel Parife of De Portal. In the 4th bolume of his Enatony 13: 182 he has the following umarks"
which I start translationals the friends franches the 2°) is often companyed and even contracted by humos effersed intothe vestebral canal, on between its membranes, on which cryonge its Surface. These humors are water, blood, mucus Lymph, Jelstinours & Steatornatoiro enalters ~ I puo or ichor which has bun the effect of inflammation. Besides these machs of discuse



the Drados induration, fofteness, inflammation hope wation and bleeration have been freed in the medula Spinalis, And there is no Joult but that like the brain is is capable of being affected by Concupion: He then "correbades by saying" in a love, the discuss of the medulla prinches have a great affinite with the bisenses of the brain, and are more common than is generally Inpoposed! In Ald time to this new contractions facts and ogsinions that have been delivered "are I the Respite and Safets of It in Diseases the brain from reducant blood. Were to live agreeably to remon, the ventricles and better Sinces of the brain would be hefficient to retire present injury to it in common

3 & trating upon pulmonary Con-= numption I advised the application of Bhoters between the shoulders along the Cervical & both Donal Vistabre . of have repeated by feen them to more Hervice when applied there, than to the Tides or breast. hay not the neason why of this be - the blister lepring Congestion in the Spinal Bistebre which supply a portion of news which write with the par Vagum & great lympathetic heroes which says are distributed to the Thornie & abbaninal viscera? Yenny not the officery of a Burgundy pitete pluster to the external parts of the Cervicul and dossaf vertebre and of other Stimulating applications to the

Cons, but the presents, pleasures & vices of civilized life, render them too search, for that purpose. The quantity of blood sent to the brain arguines the aid of the lancetto aprist the Ventireles and lateral Simes in the Uses & have receibed to him. I From the weste lavities which I have Described in the Spinal Inamon, it is alike obvious that many discuses in the herrores Ulmseulan parts of the body which are supplied with newso from the Spenal manow, are, from the inability of those cavities to afford affection room for all the blood that is sent to them, indues by too mand fatter blood in the Grinal Drawnow, and that they require, experially in this frist stage, resulties, the revene of what are too often

Lough - be owing to wins their inducing such actions in the Spinal mamors too ? V This, - from the samenep of its Chroc with Hyprouphabro intismus

prescribed for them; I mean dipliting se-- Evedrio. I shall illustrate total by sorprised to single throwse what & mean by a reference of a single discase.

There said the Hydro uphabus interness is
a induced by a similar of the blood being the to the best to the best brain as to produce a papage of its serous parts into the Uentricles, on by the force of the blood foring open the or widing the Sutures cons and places the stores pro-Juing to My dro cephalus trates exterenes.

There said further that a discuse similar toth.

Tabler, is produced in the same lause.

In the Spinul marrow by the same lause.

The Abrital Hobbe water is found in the to lavities, the may be called Hydro bystabralis intermo, The Spine Bijidanis produced by water forcing its

-- d--V which are the the effects of fines. I have called them apphalic Hates of Jenes.

way outwards by the distruction of a Grinal process, or by inscrutating itself between two of the Vertebra this enight be called a Hydrovertebra. = lis externs. The to be the best of I shall apply the facts & principles I have thus delivered to several other diseases in the signed of our letures.

Thowever quet the processions which the pentiarities in the bearing I have to noticed appear to be intended to present its discuses, from many linearmotanusthy are bot always sufficient in lower · with the Spleen, Thymus & Theyond glands & glandula renallo for that purpose. The discuss of the brain from an undere determination of blood to it are memerous. at present, I thall takes confine 2 myself only to these discuses

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